

2. The FCC correctly recognizes that software associated with CPE and telecommunications equipment is subject to Section 255.<sup>21</sup> This determination is plainly correct, as the cases cited by the Commission indicate.<sup>22</sup> Drawing a distinction between hardware and software would ultimately involve an inappropriate intrusion by the Commission into decisions as to how networks will operate and services will be provided. Hardware and software are becoming fungible in critical respects.

However, the "bundled," "unbundled" distinction that the Commission seeks to draw does not appear as sound.<sup>23</sup> At the very least, if software is produced for the function of enabling telecommunications through a CPE, it should not matter whether the software is bundled by the manufacturer or not. This is particularly so where one envisions a world where the hardware functions may be changed (and may be intended to be changed) by software that may be available directly through the manufacturer, or through some other source. For example, several manufacturers have been routinely offering 56K modems that will require a software change in order to comply with newly adopted 56K standards. In this case, the functioning of the equipment will be directly dependent on the availability of the software patch, whether provided through the manufacturer, or through some other entity. It is unclear whether the FCC's "bundled, unbundled" distinction would reach the software provided post-market by any entity. But, unless the software itself is accessible, the use of the equipment itself will be impaired.

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<sup>21</sup>NPRM, ¶ 62.

<sup>22</sup>NPRM, ¶ 63.

<sup>23</sup> NPRM, ¶ 56.

There is every reason to assume that the "bundled, unbundled" distinction will not be a good one for the future. One June 25, 1998, the Wall Street Journal reported that "Nokia, Telefon AB L.M Ericsson and Motorola, Inc." had formed a joint venture with a third party, Psion PLC, to create software that might provide the "brains behind a new generation of mobile phones."<sup>24</sup> Whether the software that results from this venture is bundled or unbundled should make little difference. Software that is intended to provide the "brains" of the equipment must be accessible if the equipment is to be accessible. Even non-critical software that does not directly affect telecommunications functions must at least "do no harm" and must not interfere with accessibility. This is consistent with the approach taken by the FCC in other contexts, see, e.g., Report and Order in CC Docket No. 89-114, 5 FCC Rcd. 6202 (1990) at ¶12 (additions to PBX systems may not "supersede or undermine" basic standards for network protection).

3. The FCC's "one manufacturer" paradigm is in many respects a practical approach to the serious issue of ensuring that some one entity bears the burden of ensuring that accessibility is achieved.<sup>25</sup> However, while the "one manufacturer" rule may make general sense as a rule of responsibility (who will generally be expected to show that a piece of equipment complies with the Act?), it is important that the Commission make clear that the "one manufacturer" rule may not be used to evade responsibility for compliance with Section 255, or allow an entity to sell a product that is inaccessible on the grounds that accessibility is not readily achievable.

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<sup>24</sup> "Phone Giants Team Up to Challenge Microsoft," Wall Street Journal p.B6 (June 25, 1998).

<sup>25</sup> NPRM, ¶ 47.

Imagine, for example, a retailer who buys and sells telephones under a custom nameplate, with the telephone being assembled by a major telephone equipment supplier. If the retailer places a limit on the amount it will pay for the telephone, and an accessible unit cannot be provided for that price, would the manufacturer be able to plead that accessibility is not "readily achievable?" Obviously, a system that makes accessibility a matter of the whim of those who sell directly to the public does not work. Treating the retailer as the manufacturer is not a totally satisfactory solution either, since the retailer may be dependent on the manufacturer's design and other decisions.<sup>26</sup>

The Commission can solve the problem, and generally maintain its "one manufacturer" paradigm through three simple principles. First, it ought to make it clear that a manufacturer may not claim that accessibility is not readily achievable based upon its contractual relationships with its suppliers or upon a failure of suppliers to produce accessible equipment. Second, the Commission should make it clear that the "one manufacturer" rule is a rule of convenience only, and that it may in fact hold anyone in a chain of commerce responsible for a failure to comply with Section 255. Third, retailers and wholesalers (like resellers on the service side) bear a responsibility to ensure that equipment is accessible, and may be required to show that they offered to purchase accessible equipment, or have not interfered with its sale to consumers. Retailers and wholesalers must also arrange for forwarding and processing of complaints, since many consumers will in fact identify the product with the entity that sells it. Under this model, while a single manufacturer will be the focus of most complaints -- and will be responsible for

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<sup>26</sup> NPRM, ¶ 59.

resolving most accessibility issues - the Commission will not be prevented from dealing with the practical realities of a complex marketplace.

**C. Network Features, Functions or Capabilities.**

The NPRM tentatively concludes that Section 251(a)(2) governs carriers' *configuration* of their network capabilities; that it does not make them guarantors of service providers' decisions regarding how to assemble services from network capabilities; and that it does not impose requirements regarding accessibility characteristics of the underlying components.<sup>27</sup> The AFB disagrees; as we discuss below, the plain language of Section 251(a)(2) requires more. The NPRM goes on to seek comment regarding the relationship between the enforcement procedures established by Section 252 for interconnection agreements and the Commission's exclusive enforcement authority under Section 255; and how responsibility for equipment should be apportioned between the manufacturer and the carrier that installs the equipment.<sup>28</sup> As we explain below, the statute includes different and additional enforcement mechanisms under Section 251(a)(2). The telecommunications carrier, the service provider and the equipment manufacturer each have accessibility responsibilities. Those responsibilities overlap in order to prevent one from avoiding its responsibilities by pointing to the other.

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<sup>27</sup> NPRM, ¶ 65.

<sup>28</sup> NPRM, ¶¶ 63-66.

AFB agrees that, in one sense, carriers are not guarantors of the service providers' accessibility decisions. On the other hand, to the extent that negotiations between a service provider and carrier result in interconnection provisions that make it more difficult to provide accessibility to the service (because of the physical location of the equipment, or the nature of the connections, or otherwise), Section 251(a)(2) would come into play. Section 251(a)(2) establishes an independent obligation prohibiting the telecommunications carrier from installing "network features, functions, or capabilities that do not comply with the guidelines and standards established pursuant to Section 255..."<sup>29</sup> The NPRM indicates that the fundamental goal of Section 255 is to make telecommunications services as well as telecommunications equipment and CPE accessible to the disabled community.<sup>30</sup> A network feature, function or capability that made it more difficult or unduly expensive to provide an accessible telecommunications service would therefore be prohibited by Section 251(a)(2), whether related to "configuration" of the network or not. For example, the intelligence of the network (as reflected in its features, functions and capabilities) may ultimately determine its accessibility. At the very least, the statute requires that carriers exercise due diligence to carry out the plain directive of Section 251(a)(2).

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<sup>29</sup>NPRM, ¶ 62.

<sup>30</sup>NPRM, ¶¶ 3-4.

Moreover, this obligation may be enforced outside of the complaint process contemplated by Section 255. Section 255 may give the Commission exclusive jurisdiction over complaints arising under Section 255, as the NPRM assumes.<sup>31</sup> However, the obligations of Section 251(a)(2) obviously arise under Section 251. There are independent bases under Section 251 for ensuring that each telecommunications carrier complies with its duties under state and federal law. There is no indication in Section 251 that Congress intended to limit those enforcement mechanisms. To the contrary, the inclusion of the obligation under Section 251(a)(2) rather than under Section 255 suggests Congress meant to permit accessibility issues to be addressed under both sections.

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<sup>31</sup>NPRM, ¶ 144.

This means, as a practical matter, that an interconnection agreement can and should be rejected by a state if it would result in a violation of Section 251(a)(2).<sup>32</sup> Moreover, it means that in any submission made pursuant to Section 251, the carrier must at a minimum explain whether or not it has complied with the mandate of Section 251(a)(2) (and how it has complied).<sup>33</sup> It further means that the responsibility for responding to complaints that raise Section 251 and Section 255 issues should lie with the carrier, service provider and the equipment provider, jointly.<sup>34</sup> Presumably, the carrier should be insisting on equipment that will permit network elements to be used to provide accessible services to the disabled. Presumably, the equipment manufacturer is providing equipment that is accessible, within the meaning of Section 255. A failure on the part of either to carry out its obligations is a violation of the Telecommunications Act of 1996. These obligations should be made explicit in the Commission's rules governing Section 251 issues.<sup>35</sup>

## **II. THE NATURE OF THE STATUTORY OBLIGATIONS.**

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<sup>32</sup> Section 251(e). Section 251(e) provides that a state commission may reject an interconnection agreement if it finds that the agreement violates any provision of Section 251. This would include, of course, Section 251(a)(2).

<sup>33</sup> Section 251(f), for example, states that "[a] Bell operating company may prepare and file with a State commission a statement of the terms and conditions that such company generally offers within that State to comply with the requirements of section 251 ..." This would include, by necessity, an explanation of how the company is complying with Section 251(a)(2).

<sup>34</sup> As the AFB pointed out above, the Commission's decision to make the final assembler responsible makes sense when one is attempting to determine who is responsible for ensuring that a single piece of equipment is accessible. However, because Section 251(a)(2) establishes an independent obligation upon carriers, it would be inappropriate to shift responsibility solely to the manufacturer or solely to the carrier.

<sup>35</sup> This is hardly an unreasonable burden. Telecommunications carriers would certainly complain if a provider attempted to operate the network or attach devices to the network that interfered with basic signaling or other functions. By virtue of Section 255 and Section 251, accessibility is now a basic feature of telecommunications networks, and as such, must be protected.

In ¶¶ 67-124, the NPRM analyzes essential terms that do not originate in the Communications Act, and that will determine whether a telecommunications provider or equipment manufacturer has satisfied its obligations under Section 255. While the Commission takes "special note" of the expertise of the Access Board, it concludes that it must interpret Section 255 in light of the broader purposes of the Act.<sup>36</sup>

As to several critical terms -- most notably, in the definition of "readily achievable," the statute contains an express definition.<sup>37</sup> The definitions in Section 255 are unambiguous: the terms mean the same as in the ADA. The Commission does not have a mandate to redefine the terms wholesale "in light of the broader purposes of the Act" or otherwise, and in fact lacks the authority to do so given the explicit directive in the Act.<sup>38</sup> In this case, as we discuss below, the Commission's redefinition has resulted in an accessibility standard that is unduly complex in several respects.

**A. Disability.**

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<sup>36</sup> NPRM, ¶ 67.

<sup>37</sup> NPRM, ¶ 94.

<sup>38</sup> Obviously, the ADA definitions were crafted to apply to existing buildings. What is readily achievable within the meaning of Section 255 may vary, for example, between existing products and new products.



The NPRM adopts the ADA definition of disability, and also proposes to incorporate a list of common disabilities identified by the Access Board as a useful guide to service providers and equipment manufacturers.<sup>39</sup>

As suggested above, this is the proper approach. The Commission does not have the authority to limit the definition of disability. At the same time, AFB agrees that it is sensible to provide guideposts that may assist manufacturers and service providers in defining the disabilities issues that they must address. The Access Board guidelines are useful and useable in this regard.

**B. Accessible To and Useable By.**

The Commission proposed to adopt the Access Board's definition of accessibility and usability. That definition is designed to ensure that there are no impediments to the "functional" use of equipment or services.<sup>40</sup>

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<sup>39</sup> NPRM, ¶ 68.

<sup>40</sup> NPRM ¶ 73.

In general, AFB supports the Commission's approach, which defines "accessibility" in a practical, not an academic manner. The Commission, recognizes, for example (at ¶72) that in order for equipment to be useable for disabled individuals, those individuals must have access to documentation regarding the product equivalent to the information available to consumers generally.<sup>41</sup> This approach is required under Section 255 of the statute, which focuses on the accessibility and usability of equipment and services from the perspective of the user.<sup>42</sup> Manufacturers and service providers, by their actions in the marketplace, have indicated what information must be available in order for equipment and services to be "accessible and useable" by consumers generally. For example, while cellular phones are delivered with a manual, it is also common for cellular phones to include an "in-unit" menu that provides some guidance for activating unit functions; and it is also common to have a number for accessing technical support. Equipment or software upgrades may be available, possibly through the Internet. The decisions to offer assistance in various forms and upgrades over time reflect both the complexities of the equipment and judgments about the way in which the equipment is likely to be used and the speed of its technological evolution. These decisions provide a guide for measuring the minimum types of information resources that must be available to persons with disabilities.

The guidelines that are described at ¶¶73-74 therefore should be supplemented to make it clear that disabled individuals should be provided options for receiving technical assistance similar to the options available to general consumers, where readily achievable. Further, this support should be available for the product life and for product upgrades. Finally, the

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<sup>41</sup> NPRM ¶ 75.

<sup>42</sup> Thus, for example, Section 255(b) requires that manufacturers ensure that "equipment is designed, developed, and fabricated to be accessible to and usable by individuals..."

accessibility of the support should be evaluated consistent with the guidelines identified by the Access Board and listed at Section 1193.33 of the guidelines.

At ¶80, the Commission asks how it should distinguish between accessibility obstacles caused by network equipment, and those attributable to service providers. As a general matter, the problem may be more difficult in theory than in fact, if the Commission simply recognizes that all parties -- the equipment manufacturer, the service provider, and the network owner -- will have independent obligations to ensure accessibility. Those independent obligations should lead to cooperative solutions, so long as the Commission makes it clear that it will presume that cooperation and sharing of information to address access problems is "readily achievable."

**C. Commonly Used.**

The NPRM proposes to determine whether peripheral equipment is "commonly used" by examining, *inter alia*, the cost of the equipment.<sup>43</sup> AFB believes that this misunderstands the nature of the "commonly used" test. The Access Board Guidelines at Subpart D, Section 1193.51 provide a more sensible approach. As those guidelines suggest, it should not matter whether a particular piece of equipment is expensive or not expensive, or has achieved wide dissemination within the disabilities community, if the equipment has inputs and outputs that are themselves standardized. A focus on the price of a piece of equipment, or even whether it is widely used necessarily will exclude from coverage some specialized access technology such as braille displays, or new and innovative equipment.

**D. Readily Achievable.**

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<sup>43</sup>NPRM, ¶ 90.

The NPRM's discussion of the "readily achievable" standard departs most significantly from the plain language of the statute.<sup>44</sup> The result is a circular and overly complex, three-prong standard that defines "readily achievable" as a function of "feasibility," "expense" and "practicality."<sup>45</sup>

*1. Feasibility.*

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<sup>44</sup>NPRM, ¶¶ 94-97.

<sup>45</sup>NPRM, ¶ 100.

The NPRM states that in determining whether accessibility is "readily achievable," it is essential to consider whether a solution is technically feasible, citing as an example the alleged technical infeasibility of fitting large keyboard buttons onto a small wireless phone.<sup>46</sup> While technological feasibility is obviously something to consider in determining whether a *particular solution* will resolve an accessibility issue, the feasibility standard, as proposed, may tend to confuse rather than enlighten. As the keyboard example suggests (and contrary to the discussion at ¶102), a simple "feasibility" standard may lead a manufacturer or service provider to believe its obligations under the statute are satisfied if it can be shown that a particular accessibility option is technologically infeasible given the design, development and implementation decisions the manufacturer or service provider has chosen to make. As discussed earlier,<sup>47</sup> a manufacturer might actually choose to eliminate a feature that is accessible in order to enhance a feature that is not. For example, a manufacturer may be able implement a design that allows 200 speed dial numbers to be activated from a video screen but no speed dial numbers via keyboard command; or to implement a design that allows 100 speed dial numbers to be activated via keyboard or video screen, at the user's choice. Accessibility for people who are blind or visually impaired is feasible if the latter approach is taken, but not in the former case. If the manufacturer can simply decide to incorporate features in a manner that *makes it infeasible to* provide accessibility, the statute will have little meaning. A simple feasibility standard therefore begs the question: the critical question is whether the manufacturer or provider considered alternatives, including an assessment of their impact on accessibility, and erred in favor of accessibility. This is the test

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<sup>46</sup>NPRM, ¶ 101.

<sup>47</sup> See discussion at p. 16.

required by the statute. As the NPRM (at n. 199) suggests, the closest corresponding ADA test considers the "nature and cost" of the action needed to provide accessibility. Returning to the original example of large keys on a small unit, this test focuses on the nature of the problem (keys not useable by persons with limited vision) and nature of the resolution required (provision of an input approach that is useable). Feasibility would only become an issue if there were no way to provide an input device. The Commission's rules should therefore be clear that there is a responsibility to define the problem, and to consider alternatives, consistent with the ADA approach. This is preferable to the adoption of the vague "feasibility" standard set out in the NPRM.<sup>48</sup>

2. *Expense.*

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<sup>48</sup>NPRM, ¶¶ 101-102.

The Commission proposes to determine the expense associated with accessibility by considering the cost of implementing accessibility, offset by the potential income stream associated with sales of the service or equipment.<sup>49</sup> In addition, the Commission proposes to take into account the "opportunity cost" associated with implementing accessibility solutions.<sup>50</sup> While expense is obviously something that is appropriately considered in the context of the ADA, the expense test proposed by the Commission is unworkable. The "opportunity cost" analysis, for example, assumes that opportunity costs can be sensibly quantified -- and that had a particular company devoted resources to some other enterprise, that enterprise would have proven profitable. Thus, the Commission (at ¶104) suggests that it will consider the fabrication resources required to build a product, although it is not clear why it should be presumed that the facilities would have been useable for some other purpose, or that the use would have been profitable. The cost of determining the opportunity cost will be enormous. Moreover, it cannot possibly lead to the result contemplated by the statute. By definition, if manufacturers believed that the best use of their dollars was to produce accessible equipment, the equipment would be produced; the fact that Congressional intervention was required suggests the possibility that the opportunity cost analysis is being made in the market place and is being resolved in a manner that Congress decided was inconsistent with important public policies.

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<sup>49</sup>NPRM, ¶ 103.

<sup>50</sup>NPRM, ¶ 104.

Even the process of determining the "net" expense associated with providing accessibility, while more defensible, is likely to be a speculative enterprise at best. The process is made even more confusing by the fact that the NPRM proposes to consider the same issue in several different ways. Thus, not only does the Commission propose to consider the "net" expense (which appears to be the cost of the feature minus additional income), the NPRM also proposes to consider "cost recovery," which appears to require the Commission to identify the incremental cost of a feature, and whether that incremental cost will be recovered.<sup>51</sup> Further, the NPRM's analysis ignores the fact that in this technologically evolving field, it is not at all clear how "expense" should be accounted for. A feature that industry wished to add might be very expensive, but might nonetheless be added to a particular product even where adding the feature might not otherwise seem to be justified because adding the feature might pave the way to new markets, or because the cost of the feature might well be spread across several product lines. In order to consider the expense of including voice activation features in a particular cellular phone, for example, one would need to ask whether that expense is properly allocated to the particular product or should be spread across several other products.

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<sup>51</sup> NPRM, ¶¶ 115-116.



There is no particularly good way to determine opportunity cost or net expense or cost recovery based on "expeditious procedures," without creating simple rebuttable presumptions.<sup>52</sup> There may be a basis for presuming that the cost of providing access is in fact low, because the same options that make a product accessible to what has traditionally been defined as the disabled community will often make the product more useable or useful to the general consuming public. Equipment that is voice-activated, and equipment that can convert text-to-speech may be critical to persons who are blind. Chairman Kennard has emphasized this point in recent speeches.<sup>53</sup> It has also become clear that such features are enormously beneficial to others

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<sup>52</sup> The Commission's efforts to develop a simplified cable rate regulatory structure that, *inter alia*, would nonetheless permit it to determine the "net" cost of programming have required the Commission to revise its rules at least 14 times in a span of only six years; the Commission has recently suggested that its rules may not be adequate to allow it to identify these "net" costs, and that further investigation may be necessary to determine whether programming charges levied by cable companies are reasonable. The Commission's description of the "expense" test it proposes to apply here likewise seems to invite regulatory confusion.

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Remarks by William E. Kennard, Chairman, Federal

Communications Commission to WIRELESS 98, Atlanta, Ga. (February 23, 1998). "The best way [to achieve accessibility] is to consider access issues at the front end -- during the development and design

who may wish to "hear" their e-mail messages, or activate calling card features by voice, rather than from a keypad. Therefore, absent some showing that an accessibility feature is not useable by the general public, or that an accessibility feature cannot be marketed more generally (because of legal constraints, for example), the Commission should presume that any expense will be offset by net benefits. If there is such a showing that an accessibility feature is not useable by the general public, then the question is a much simpler one: what is the incremental cost of the accessibility feature? That cost must then be balanced against the resources available to the provider to determine whether accessibility is "readily achievable" given the costs associated with it.

### 3. *Practicality.*

The "practicality" standard devised by the Commission seems designed to consider the organizational resource issues implicit in the ADA definitions at 301(9)(B)-(D). The FCC proposes to consider the resources available to the provider to meet expenses associated with accessibility; to consider the potential market for the product or service; to consider incremental cost; and to consider product life cycle issues.<sup>54</sup> One of the issues that the Commission proposes to consider as part of the "practicality standard" -- the incremental cost issue -- duplicates the investigation conducted in determining the expense of accessibility and is unnecessary. The remaining tests are discussed below.

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process. It is an area where the truly innovative can help the disabled -- and create a lucrative market. After all, look at other products first designed as "disability solutions": vibrating pagers, ball mice, speaker phones. They are on the mass market now. Speaker phones, Motorola's new talking pager, and PacBell's priority ringing service can be used by everybody. At the Winter Olympics, Japan's NTT is testing another product with great potential for more than the disabled. It's a mobile phone that can be worn like a watch, weighs less than two ounces and uses voice-recognition, not a keyboard. "

<sup>54</sup>NPRM, ¶ 106.

*i. Resources.*

The FCC (at ¶¶ 109) proposes to examine the resources of the corporation or equivalent organization that is legally responsible for the equipment or service, subject to presumptions which are designed, on the one hand, to prevent companies from establishing sub-units that do not have access to the resources other units may have; and on the other to look only at the resources of a sub-unit that does not have access to the resources of the parent.

AFB generally supports this approach, with three important modifications.

First, in determining whether a corporation or other unit should be deemed to have access to the resources of the parent, the Commission must examine not only whether the corporation has access to the resources of the parent generally, but also whether other corporations or units of the parent have access to parental resources. That is, one cannot create isolated sub-units in order to evade Section 255 responsibilities.

Second, in determining whether a sub-unit does not have access to the resources of the parent, the Commission should make it clear that the impediment to resource access must be legal and not simply budgetary. In response to the NOI, several industry groups pointed out that products might be created by sub-units that are given very limited budgetary resources, as a matter of corporate policy. However, Section 255 places the legal responsibility on the service provider or the telecommunications equipment manufacturer, not upon the sub-unit. The parent cannot avoid its responsibility by creating underfunded production sub-units. This is particularly important in the context of Section 255, where an accessibility option (e.g., voice activated features) developed in connection with one product may have application to other products

outside the sub-unit. Focusing on the legally responsible entity will allow the Commission to determine whether development of an accessibility feature is "readily achievable."

Third, the Commission should add a final test. As noted above, the Commission has proposed to identify the "equipment manufacturer" as the final assembler. The "resource" analysis echoes that approach, and raises some of the same concerns that AFB discussed earlier. With respect to parents and subsidiaries that create a marketing chain responsible through different legal entities for the collective "design, development and fabrication" of a product, at the very least the resource analysis should look to the resources available through the entire chain. For example, a parent company might purchase and then market products from a subsidiary under its own name, and bear responsibility for technical support of the product. Under this example, the parent, as well as the subsidiary has responsibility for compliance under Section 255. Therefore, resources of the parent (if greater) should be considered in determining whether access is readily achievable, even if the parent would not ordinarily make the resources available to the subsidiary.

*ii. Market Considerations.*

The Commission proposes to take market considerations into account in determining whether it is practical to make a product accessible. The Commission (at ¶¶ 111-114) seeks comment on whether and how these considerations should be taken into account.

As the Commission recognizes, a standard that relies on "market considerations" is likely to lead to specious claims that accessibility will adversely affect the marketability of a product.<sup>55</sup>

While the FCC states that it does not intend to entertain such claims, it is doubtful that the

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<sup>55</sup> NPRM, ¶ 113.

claims could be avoided.<sup>56</sup> Particularly troubling is the Commission suggestion that one might consider whether the accessible product would compete with non-accessible products in terms of price and features. The goal of Section 255 is to provide accessibility for all equipment and services. Allowing accessibility to be denied by comparison to non-accessible equipment and services results in a circular analysis that undercuts the mandate of Section 255. It does not appear to be necessary to address "market considerations" independently as part of the "readily achievable" test.

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<sup>56</sup> NPRM, ¶ 113.

Finally, in its discussion of “market considerations,” the FCC declines to adopt the “no net decrease” rule proposed by the Access Board, apparently because the Commission believes that manufacturers should be allowed to make “legitimate feature tradeoffs” or because the rule may somehow discourage innovation.<sup>57</sup> AFB does not believe that the Commission’s innovation concerns are well-grounded and its “trade-off” test cannot be squared with the statute. It does not appear to the AFB that the Commission has the option of allowing innovation that limits *existing* accessibility. Section 255 mandates accessibility where it is readily achievable, and as the FCC recognizes, “the fact that a product has particular accessibility features is evidence that inclusion of those features in later products from the same producer is readily achievable.” The Congressional mandate appears to AFB to decide that innovations that limit accessibility are not permitted. Graphical user interfaces (to take one “innovation”) present problems for the blind if implemented in one particular way (without appropriate backward compatibility and without the capability of interacting with the icon without seeing it) but could also be implemented in a way that does not create these problems. That should be the required result. The Commission has recognized that speed dialing is a telecommunications service. Many older cellular phone models permitted numeric keyboard activation of speed dialing, ringer tone/volume, and other features which were accessible to people who are blind or visually impaired. By contrast, most newer models reduce or eliminate numeric keypad control of functions and features, requiring the user instead to scroll through a menu of options shown on a visual display which, of course, is inaccessible to a person who is blind. In one sense, this is a product innovation: the convenience of an expanded menu-driven interface for those who can see the menu; but it is a tremendous

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<sup>57</sup> NPRM, ¶ 114.

step backward for users who are blind, or anyone else who must use the phone in poor lighting conditions. This sort of access-limiting approach makes precisely the tradeoffs that the law was intended to prevent. The Access Board's "no net decrease" guideline should be adopted."

*iii. Timing issues.*

The Commission generally draws a distinction between new products and old products, assuming that features are more difficult to add at the end of the development cycle or post-development. Hence, the FCC states that once a product is introduced without the accessibility features (because accessibility was not possible at the time) it need not be retrofitted to incorporate subsequent accessibility features.<sup>58</sup>

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<sup>58</sup> NPRM, ¶ 120.

The Commission's analysis is correct to the extent that it assumes that retrofitting may not be possible for certain existing products. But, the sort of blanket presumption the NPRM proposes to adopt is not justified and runs counter to the access board guidelines. Product upgrades, through software or hardware additions may be made available by a manufacturer during the course of the life of a product. For example, a corporate phone system may remain in place for years, but may be upgraded via hardware or software additions that add or modify features over time.<sup>59</sup> These sorts of upgrades should incorporate accessibility features, to the extent readily achievable. Even additions to documentation may sometimes make a product accessible, by explaining how advanced features can be manipulated. Likewise, to the extent that it is "readily achievable" to add accessibility features post-development, the features ought to be added. An exception could be drawn where the manufacturer could show that the cost of the add-on to the product would be roughly equivalent to the price of purchasing a new unit, and further shows that it is or will be making a new unit available within a short period of time. As a general matter, the replacement unit should have been fully tested and be in the final phase of production before a manufacturer may take advantage of this defense.<sup>60</sup>

## **II. IMPLEMENTATION ISSUES.**

The major problem with the complaint process devised by the Commission is that it does not ensure that there will be any way to easily determine whether or not a company is in fact

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<sup>59</sup> Indeed, the FCC needs to recognize that some equipment or systems are actually expected to remain in place for relatively longer period of time, and may be marketed based on an ability to be upgraded over time. Certainly where products are touted as upgradeable, and a company devotes sales efforts to upgrades, the process of designing, fabricating and implementing the upgrades should include efforts to add accessibility.

<sup>60</sup> An additional issue arises where a manufacturer or service provider simply fails to abide by the mandates of Section 255. In such a case, it is appropriate to order retrofitting even if the retrofit would not ordinarily be required "readily achievable." Otherwise, a company could avoid Section 255 altogether simply by evading the law until it was no longer possible to comply cheaply.



taking the steps required to comply with Section 255. As is clear from the Initial Regulatory Flexibility Analysis, the only "recordkeeping requirement that the Commission proposes is for each covered entity to provide a point of contact for referral of consumer problems." This means that companies will not have internal, written guidelines for implementing Section 255, nor will they be required to maintain records of e.g., the manner in which the FCC guidelines were taken into account in the product design, development and fabrication processes.

However, the efficacy of the proposed rules depends upon industry considering accessibility issues throughout product development. As the Commission has suggested, the rules are very process oriented.<sup>61</sup> But, unless the process is defined, and its implementation reviewed, there is no reason to suppose that the process is likely to operate well or serve the statutory goals.

Likewise, without documentation, the "readily achievable" test that the Commission proposes is likely to be impossible to apply without extended hearings. The informal process, to be most effective, requires that complainants be able to determine to their satisfaction whether accessibility was or was not readily achievable. A process that does not have this effect will result in the submission of more formal complaints.

AFB therefore suggests a simple four-pronged approach that will render the FCC's implementation procedures more efficient.

First, every telecommunications service provider, every equipment manufacturer and every carrier subject to 251(a)(2) should be required to develop an accessibility plan defining precisely how it intends to implement the accessibility obligations through the product and service development process. To the extent that a product is tested, the testing should include

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<sup>61</sup>NPRM, ¶ 124.